

CLAIMS

1. A portable communication device for conference calls, comprising at least first and second speech encoder paths with first and second inputs for connection to first and second recording devices, respectively, and at least one
5 output connected to signal processor means for receiving and processing first and second electronic signals from said recording devices via said first and second speech encoder paths for transmission to a transmitter/receiver operatively connected to said signal processor means, wherein said apparatus is adapted to receive said first and second electronic signals simultaneously even if
10 the signals are different, and said apparatus comprises a summator adapted to sum said first and second electronic signals into a sum signal for transmission to said transmitter/receiver.

2. A portable communication device according to claim 1, wherein
15 said summator is adapted to sum said first and second electronic signals into a sum signal for transmission to at least two outputs, and operatively connected to said signal processor means, for connection to recording devices, such as earphones.

20 3. A portable communication device according to claim 1, wherein said signal processor means is a digital signal processor.

4. A portable communication device according to claim 3, further
25 comprising at least an analogue-to-digital converter for converting said first and second electronic signals into digital signals before input to said digital signal processor.

5. A portable communication device according to claim 4, wherein said summator is a part of said digital signal processor.

6. A portable communication device according to claim 4, wherein said summator is an analogue summator, which is a part of said first and second speech encoder paths for summing said first and second electronic signal into an analogue sum signal before A/D conversion into a digital sum signal.

7. A portable communication device according to claim 2, further comprising a sidetone generator for generating a first sidetone of said first electronic signal for transmission to said recording devices, and a second sidetone of the second electronic signal for transmission to said recording devices simultaneously via a speech decoder path of said phone.

8. A portable communication device according to claim 7, wherein said sidetone generator is a part of said digital signal processor.

9. A portable communication device according to claim 7, wherein said sidetone generator is an analogue sidetone generator connected between said first and second speech encoder paths and said speech decoder path of said phone for transmission of said first and second electronic signals to first and second earphone outputs of said speech decoder path.

10. A portable communication device according to claim 1, wherein said first recording device is a conventional fixed microphone or a microphone in a first portable handsfree device, and said second recording device is a

microphone in a second portable handsfree device, and said first earphone is a conventional fixed earpiece or an earphone in said first portable handsfree device, and said second earphone is an earphone in said second portable handsfree device.

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11. A portable communication device according to claim 1, wherein at least one of said first and second inputs are adapted for wireless connections to said first and second recording devices.

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12. A portable communication device according to claim 2, wherein at least one of said at least two outputs is adapted for wireless connections to at least two recording devices.

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13. A portable communication device according to claim 12, wherein said wireless connections are short-range radio communication links.

14. A portable communication device according to claim 1, wherein the portable communication device is a mobile telephone apparatus.

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15. A CODEC block for use in a portable communication device for conference calls, comprising first and second speech encoder paths, with first and second inputs for connection to first and second recording devices, respectively, and a common output for connection to signal processor means of a phone, wherein said block is adapted to receive first and second electronic signals simultaneously from said recording devices even if the signals are different, and said block comprises a summator for summing said first and

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second electronic signals into a sum signal for transmission to a transmitter/receiver of the phone.

16. A CODEC block according to claim 15, wherein said summator is adapted to sum said first and second electronic signals into a sum signal for transmission to at least two outputs, and operatively connected to said signal processor means for connection to recording devices, such as earphones.

17. A CODEC block according to claim 15, further comprising at least an analogue-to-digital converter for converting said first and second electronic signals into digital signals before input to said digital signal processor.

18. A CODEC block according to claim 17, wherein said summator is an analogue summator, which is a part of said first and second speech encoder paths for summing said first and second electronic signal into an analogue sum signal before A/D conversion into a digital sum signal.

19. A CODEC block according to claim 15, further comprising a sidetone generator connected between said first and second speech encoder paths and a speech decoder path for transmission of said first and second electronic signals to first and second earphone outputs of said speech decoder path.

20. A CODEC block according to claim 19, wherein said sidetone generator is an analogue sidetone generator.

21. A method of conference calls in a portable communication device, wherein first and second electronic signals are received from recording devices operatively connected to said portable communication device comprising the steps of receiving said first and second electronic signals simultaneously even if the signals are different, and generating a sum signal of said first and second electronic signals for transmission to a transmitter/receiver of said portable communication device.

22. A method according to claim 21, further comprising the step of generating a sum signal of said first and second electronic signals for transmission to at least two outputs of said portable communication device for connection to recording devices, such as earphones.

23. A method according to claim 21, further comprising the step of generating a first sidetone of said first electronic signal for transmission to said earphone outputs, and a second sidetone of the second electronic signal for transmission to said earphone outputs.